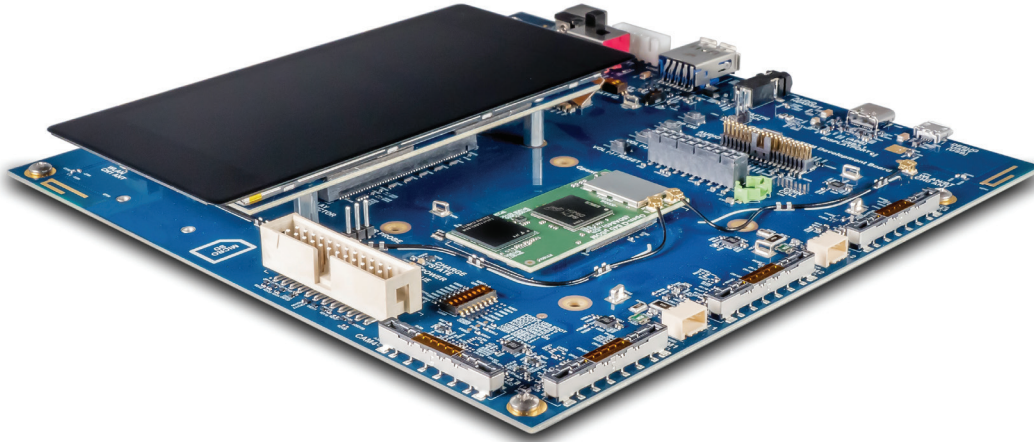


# Open-Q™ 845 μSOM Development Kit

Based on the Qualcomm® SDA845 SoC

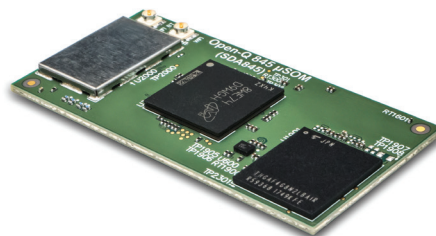


Lantronix's Open-Q™ 845 μSOM Development Kit is a versatile, easy-to-use, exposed board platform, powered by our ultra-compact, production-ready, Open-Q™ 845 μSOM. The 845 μSOM is based on the powerful Qualcomm® SDA845 SoC, one of their most powerful IoT chipsets. With new processing capabilities, on-device AI powers, and generous I/O, the 845 μSOM is ideal for powering the most advanced robotics, drones, cameras, and embedded IoT devices.

The development kit provides the ideal starting point for evaluating the Open-Q™ 845 μSOM or developing next generation embedded and IoT devices. The platform consists of Lantronix's Open-Q™ 845 μSOM, an open-frame carrier board exposing all the available I/O, and a range of accessories to fast track your product development.

## Key Features

- Qualcomm® SDA845 SoC
- Powered by micro-sized (50x25mm) Open-Q 845 μSOM
- Open-frame Mini-ITX Form-factor carrier board for evaluation and development
- Numerous I/O and connectivity options
- Optional LCD/touchscreen and cameras
- Wi-Fi and Bluetooth antennas on carrier board
- Android™ 10, Yocto Linux®



Open-Q™ 845 μSOM

## Engineering Services:

We provide a full solution – our unparalleled engineering expertise and product development skills deliver innovative products that are cost-effective and can jumpstart your Go-to-Market timeline.

Our business model offers turnkey product development services, or we can augment your team in specific areas of development. The choice is yours.

## Key development expertise in:

- Camera development and tuning
- Voice control
- Machine learning
- Mechanical & RF design
- Thermal & power optimization

IoT Product Development made easy



# Lantronix Open-Q™ 845 μSOM Development Kit

## Hardware Specifications:

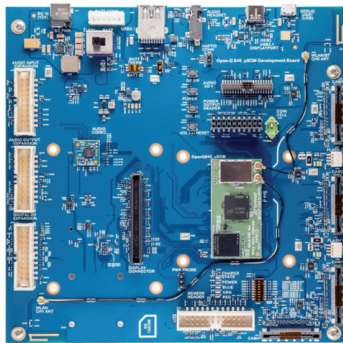
Open-Q™ 845 μSOM		*See the Open-Q 845 μSOM product brief for complete details
• Processors	Qualcomm® SDA845 built on 2nd-Gen 10nm technology: Kryo™ 385 Quad-core CPU, Hexagon™ 685 DSP, Adreno™ 630 GPU	
• Memory/Storage	4GB or 6GB dual-channel high-speed LPDDR4X SDRAM at 1866MHz + 32GB or 64GB UFS Flash Storage	
• Wireless	Wi-Fi 802.11a/b/g/n/ac 2.4/5Ghz 2x2 MU-MIMO (WCN3990) + Bluetooth 5.x	
• Power Management	Qualcomm® PM845 + PM8998 + PM8005 power management and battery charging on SOM	

## Open-Q™ 845 μSOM Carrier Board

• Display Interfaces	DisplayPort v1.4 on USB Type-C, up to 4K60 with USB data concurrency 2x 4 lane MIPI DSI connector for optional LCD / Touch panel accessory or custom display adapters
• Camera Interfaces	3x 4-lane MIPI CSI + 1x 2-lane MIPI CSI with connectors to mate to optional camera accessories
• Audio Interfaces	Qualcomm® WCD9340 Hi-Fi audio codec module on carrier board, with 1x 3.5mm headset jack (stereo out + mic in) Additional audio expansion: Analog output header, Analog input header, digital I/O header (SLIMBus/I2S/PDM)
• I/O Interfaces	2 USB ports: 1x USB3.1 Type-C + DisplayPort v1.4 with USB data concurrency, 1x USB 3.1 Type-A host 1x PCIe Gen3 1-lane, microSD card socket I/O expansion headers with UART, I2C, SPI, configurable GPIOs
• Wireless	Dual Wi-Fi/BT PCB antennas on carrier board
• Power Input	Input: 12V/3A (adapter included) or single-cell Li-Ion battery (not included)
• Form Factor	SOM: 50mm x 25mm, Carrier Board: Mini-ITX 170mm x 170mm

## Software:

• OS Support	Android™ 10, Linux OS based on Yocto Rocko, kernel v4.9 * Note that all hardware features may not be supported by all SW — see latest SW release notes for details.
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Optional Display and Camera

**Development Kit includes: Carrier board, 845 μSOM (4+32GB), ST Micro sensor board, 12V power supply, Quick Start Guide, access to full documentation, SW updates, and basic development kit support.**

## Purchasing Information:

• Open-Q™ 845 μSOM Dev Kit	PN: QC-DB-P10003
• Open-Q™ 845 μSOM (4+32GB)	PN: QC-DB-P10004
• Open-Q™ 845 μSOM (6+64GB)	PN: QC-DB-P10004A
• Open-Q™ LCD	PN: QC-DB-G00005
• Open-Q™ 13MP Camera	PN: QC-DB-I10006

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